
Consumer Awareness towards Organic Food: A Pilot Study in Jordan

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ABSTRACT

This study aims at analysing the awareness level of consumers towards organic food products, using a structured survey of 384 respondents in major city in Jordan- Amman-. Of the total respondents surveyed, 69% respondents have reported awareness on organic foods. Logistic regression model has been estimated to identify the most likely factors affecting the consumers' awareness on organic food. The results of logistics analysis indicate that potential Jordanian consumers' awareness of organic food is strongly and significantly affected by factors such as education, occupation, marital status, income, desire, promotion, quality, health issues, and product source. The awareness is not affected by factors such as gender, age and Trademark. Results of the study have great implication for promoting organic food markets, domestically as well as globally.

Keywords- Awareness, Organic Food, Logistics Analysis, Jordan

I. INTRODUCTION

Organic farming is produced in order to produce healthy and quality food without using of synthetic chemical products [2]. Thus, the organic farming not Maintains only the environment but also it improves public health, and bringing significant benefits both in the economy as well as to the social cohesion of rural areas [1]. With increased awareness of domestic problems related to pesticide poisoning and diseases of fresh food products, and the Jordanian government more than accounted approach in the area of food safety [18]. Achieved many studies, knowledge , awareness, attitude and behaviour of consumers towards organic food in both developed and developing countries. It has been said that consumer awareness and knowledge as well as the consumption of organic food is much higher in developed countries than in developing countries [4]. In countries such as Jordan, where there are still markets for organic food at an early stage of its growth, has a relatively low level of awareness [16].

The Awareness and knowledge has become decisive factor in changing of attitude and behaviour of consumers towards organic foods, which is expected to drive the growth in the organic food markets, have begun recent experience of Jordan in organic farming, but they are going quickly, due to the attention of the Ministry of Agriculture has started this interest since 2001, when established a special department in the Ministry of Agriculture of Jordan to develop the activities of organic farming, and this device is currently the activities of training and rehabilitation, and survey information and statistics, but on the ground did not exceed acreage in agricultural production Organic 7 hectares. In 2003, the Federation of Agricultural Engineers Association in Jordan creates producers of organic agriculture in Jordan [12]. Also in Jordan has been established "The Jordanian Society for Organic Farming" (JSOF) is a nongovernmental organization established in 2005 and aims to encourage and help farmers and produces to adopt organic farming as an sustainable agriculture system to produce foods and products fulfil organic food standards while conserve the environment. JSOF aims also to raise awareness on organic farming concepts and benefits for all target groups as well as organic farming results for the environment to achieve sustainable socioeconomic and environmental development [8].

There are many factors that affect the level of awareness about organic food among consumers. In late studies, it has been investigated experimentally that social formations , demographic , and food buying behaviour and knowledge of nutrition to consumers are likely to affect the level of awareness and purchasing decisions of organic foods[7,19,10,13,4] . There have been a considerable number of studies on organic consumers in many countries, especially in Europe and other western countries [14, 6, 11, 16, 4, 5, 17, 15, 3, 2]. However, the authors have not come across literature related to analysing consumers towards organic food products Jordan, some studies was examining the organic food value chain in Jordan is minimal, have been conducted in the context of agriculture production, or supply, perspective, but not conducted from the perspective of consumers [9]. Therefore, there was an immediate need to carry out such an analysis for future steps taken for any improvement in consumer awareness towards organic food in Jordan.

II. PROBLEM STATEMENT

Organic food consumption is increasing because of concerns over environmental and health issues associated with food production. And there is an urgent need to investigate the situation of organic food demand, especially in developing countries such as Jordan. As consumer knowledge and awareness is an important drive for growth in the organic food market, And thus

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achieve the position of consumers and their behaviour towards organic foods may help both consumers of organic interest and marketers of organic food.

III. STUDY OBJECTIVE

This study aims at analysing the awareness level of consumers towards organic food products, As awareness and knowledge about the different attributes of organic food is essential to create market demand for organic products, the study also identifies the most likely socio-demographic, food safety and consumer information factors affecting awareness level using a Logistics regression model.

IV. MATERIALS AND METHODS

1. Data collection: A cross-sectional study was conducted and the questionnaire was administered between February- March 2013 to determine the Awareness about organic food of 384 consumers who were randomly recruited at shopping areas and public places in Amman, the capital of Jordan. A structured questionnaire was designed to collect the research data. The questionnaire was pilot tested by 40 participants from April 2013, resulting in minor modifications made to the wording of the questionnaire. The revised questionnaire contained 25 questions in 2 sections, was administered by intern dieticians as a face to face method. Section A of the questionnaire contained open-ended and closed questions dealing with demographic characteristics (age, education, marital status etc.). Section B contained questions concerning with the Awareness about organic food. The questionnaire took approximately 30 minutes to be completed Consumers' consent was required prior to commencement of the study.

2. Sample size: (384) Consumers' were interviewed throughout the population (688360), the sample size was determined according to the following equation:

$$n = \left\{ \frac{(p \times q \times z^2)}{e^2} \right\} / \left\{ (N \times e^2) + (z^2 \times p \times q) / (N \times e^2) \right\}$$

n = Sample Size.

P = The proportion that the sample will occur = (0.5).

q = The proportion that the sample will not occur = (1- p) = (0.5).

z = The standardized score = (1.96).

e = Error term = (0.05).

N = Population = (688360).

Where:

3. Statistical Analysis:

Simple data analysis techniques were adopted such as descriptive statistics; cross tabulation and chi-square test using SPSS 17.0. The Logistics Regression Model has been used to analyse the factors influencing the awareness level of consumers on organic food.

V. RESULT AND DISCUSSION

1. Socio-Demographic Profile of Samples:

General characteristics of participants by gender, age, education, marital status and monthly income according to consumer awareness were described in Table1. of the 384 respondents have reported awareness on organic foods i.e. 72% of total respondents, Female are comparatively more aware than male. The majority 58% of the respondents were in the age below 40 years with an average age of 34 years. The young generation more aware and concerned about food safety and issues including environmental food products such as organic food. This also supports the findings that respondents with age less than 40 years old are significantly more aware of organic food than its elder counterpart ($\chi^2 = 13.741, P=0.008$), This could certainly be because strength and effectiveness of agricultural media to spread awareness to importance of organic food.

Education plays important role to promote awareness among people. The chi-square tests results revealed significant difference in education among those aware of organic foods and unaware ($\chi^2 = 9.069, P=0.028$), which implies that educated people are comparatively more aware of organic foods. It is also evident that about 83% percent respondents, with awareness on organic foods. The majority 81% of married participants were aware on organic food ($\chi^2 = 4.213, P=0.041$). As for income level of the consumers are concerned, majority of the respondents belong to (400-501 JD) income levels and have higher level of aware(48%) of organic food products than respective counterparts food ($\chi^2 = 15.669, P=0.001$).

TABLE 1. GENERAL CHARACTERISTICS OF PARTICIPANTS ACCORDING TO CONSUMER AWARENESS

General characteristics	Consumer Awareness		Total	Chi-Square	Sig.
	Unaware n(%)	Aware n(%)			
Gender					
Male	32(29)	77(71)	109(28)	6.748	0.034*
Female	85(31)	190(69)	275(72)		
Age					
< 29	27(25)	82(75)	109(28)	13.741	0.008*
30-39	36(31)	79(69)	115(30)		
40-49	28(29)	67(71)	95(25)		
>50	17(26)	48(74)	65(17)		
Education					
educated	53(17)	266(83)	319(83)	9.069	0.028*
Uneducated	18(28)	47(72)	65(17)		
Marital status					
Single	36(28)	91(72)	127(33)	4.213	0.041*
Married	49(19)	208(81)	257(67)		
Monthly income					
<400JD	13(22)	47(78)	60(16)	15.699	0.001*
401-500JD	29(16)	155(84)	184(48)		
501-600JD	18(28)	46(72)	64(17)		
>601JD	22(29)	54(71)	76(20)		

Source: Survey results, *P<0.05

2. Factors affecting consumers towards organic food products:

Table 2 Shows the Logistics Regression Model for analyze the factors affecting consumers towards organic food products. The experimental model estimates the relationship between socio - demographic factors of the consumers and awareness level. The result of regression analysis indicates are likely important socio-demographic factors affecting the awareness level of the consumers on organic food.

Findings of regression analysis indicate that education, occupation, marital status, income, desire, promotion, quality, health issues, product source are likely important socio-demographic factors affecting the awareness level of the consumers on organic food. In logistic regression analysis; consumer awareness had significantly positive associations

with factors affecting without gender ,age and trademark (P<0.05) The findings of this study have critical implications for all stakeholders involved in organic food certification, production, processing and marketing.

TABLE 2: FACTORS AFFECTING CONSUMERS TOWARDS ORGANIC FOOD PRODUCTS

Variables	β	S.E	Wald	Exp (β)	Sig
Gender (1= male,0= female)	0.207	0.915	0.051	1.230	0.821
Age (1= < 29, 0 = otherwise)	0.132	1.146	0.013	0.877	0.908
Education (1= educated, 0 = otherwise)	4.884*	1.573	9.641	132.115	0.002
Occupation (1= worker, 0 = otherwise)	4.002*	1.093	13.397	54.681	0.000
Marital status (1 = Single, 0 = otherwise)	1.055*	0.276	14.608	0.348	0.000
Income (1 = <500, 0 = otherwise)	2.103*	0.296	50.360	0.122	0.000
Desire (1= Like organic food, 0 = otherwise)	1.116*	0.251	19.836	0.328	0.001
Promotion (1 = use of promotion, 0 = otherwise)	0.676*	0.291	5.410	1.966	0.020
Quality (1 = food quality, 0 = otherwise)	0.681*	0.291	5.533	1.933	0.019
Health issues (1 = healthy food, 0 = otherwise)	1.054*	0.276	15.855	0.348	0.000
Trademark (1 = There are a trademark, 0 = otherwise)	0.250	0.285	0.769	1.284	0.381
Product Source (1= local, 0 = otherwise)	2.728*	0.908	9.031	15.302	0.003
Constant	0.331*	0.103	9.016	0.733	0.003
Nagelkerke R ²	0.827				
Value of log-likelihood function	158.73				
Correct prediction (%)	53				
Chi-squared	369.05*				

Source: Survey results, *P<0.05

VI. CONCLUSION AND IMPLICATION

Consumer concerns about food safety, quality and nutrition are becoming increasingly important in all around of the world, which has provided increased opportunities for organic foods in recent years. Demand for organic food is steadily increasing in developed countries, while developing countries still need to go a long way. You need untapped potential markets for organic food in countries such as Jordan to be realized with the different front's organization interventions, which require a better understanding of consumer preferences on food.

Therefore, the analysis can be considered to raise consumer awareness of the various aspects of organic products, such as land is important to build markets for organic food in the first phase of the development of the market. The survey results

revealed that only 69% of total respondents were aware of 'organic food, It indicates that for majority of the even aware people 'organic food' is still away from their food basket. The results of logistics analysis indicate that potential Jordanian consumers' awareness of organic food is strongly and significantly affected by factors such as education, occupation, marital status, income, desire, promotion, quality, health issues, product source.

The awareness not affected by factors such as gender, age and Trademark. Results of the study have a significant implication to understand consumer awareness and knowledge on organic foods. To take advantage of the market potential in organic food, and organic industry needs to educate consumers. And Certain attention should be concentrated on price and availability as well as development of direct sale and specialized shops. Moreover, producers should pay certain attention to declaration elements.

Results from this paper are of great importance because they provide valuable information on consumers in Jordan that can be used by policy makers in organic farming at the national and regional level.

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